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| JEREMY J CURCURI                             |                |                      | EXAMINER            |                  |
| BROOKS & KUSHMAN<br>1000 TOWN CENTER 22ND FL |                | SRIVASTAVA, VIVEK    |                     |                  |
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 13

Application Number: 09/378,674 Filing Date: August 20, 1999

Appellant(s): Lee G. Lawrence ET AL.

Jeremy J. Curcuri
For Appellant

## **EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed 12/13/01.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences

which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

## (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

## (7) Grouping of Claims

Appellant's brief includes a statement that claims 11-15 and 18 stand or fall together and provides reasons as set forth in 37 CAR 1.192(c)(7) and (c)(8).

## (7) Grouping of Claims

Appellant's brief includes a statement that claims 11-15 and 18 do not stand or fall together and provides reasons as set forth in 37 CAR 1.192(c)(7) and (c)(8).

# (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims

under appeal.

| 5,477,263 | Atalla et al   | 11-1998 |
|-----------|----------------|---------|
| 5,555,277 | Lawrence et al | 9-1996  |
| 5,371,551 | Logan et al    | 12-1994 |

#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 U.S.C. § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 11 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atalla et al (5,477,263) in view of Lawrence et al (5,555,277).

Considering claim 11, Atalla discloses receiving a signal at a headend (fig 2, col 2 lines 2 - 17, col 3 lines 16 - 46, signal on link 34 is transmitted to community center 10 or headend), establishing a buffered storage queue at the headend that receives the signal (col 3 lines 16 - 46, col 4 lines 32 - 67), transmitting a stream from the headend (fig 2 item 65, col 3 lines 16-46), the stream being derived from the signal (fig 2, col 3 lines 16 - 46, col 4 lines 10 - 18, stream 65 is derived from the signal transmitted to the headend from master files via link 34), and the stream originating from a user selected playback point in the buffered storage queue (col 3 lines 16 - 46, col 5 lines 9 - 12, playback point can be selected by fast forwarding or reversing video in the

buffer).

Atalla fails to disclose a communication system including a headend which sends programming to a plurality of hubs with each hub sending the programming to at least one node that distributes the programming to end users. Lawrence recognizes the problem of signal attenuation over long distances and teaches using hubs and nodes equipped with amplifiers to remedy this problem (see col 2 lines 12 - 32 and col 4 lines 30 - 48). It would have been obvious including hubs and nodes equipped with amplifiers in the transmission system of Atalla would have reduced signal attenuation thus providing a higher quality signal for the end user. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify Atalla to include the claimed plurality of hubs and nodes to provide a higher quality image for the end user.

Regarding claim 12, Atalla discloses unicasting a plurality of streams (fig 2 - unicasted streams are met by plurality of streams 65 transmitted to user destination 90), each stream being derived from the signal (fig 2, col 3 lines 16 - 46, col 4 lines 10 - 18, each stream 65 is derived from the signal transmitted to the headend from master files by signal 34), and each stream originating from a corresponding user selected playback point in the storage queue (col 3 lines 16 - 46, col 5 lines 9 - 12, playback point can be selected by fast-forward or reversing video in the buffer).

Regarding claim 13, Atalla discloses in response to a user at a destination requesting to pause (col 2 lines 55 - 58, col 9 lines 26 - 30), sliding the user selected point within the queue at such a rate to cause the playback point to remain substantially stationary in time (col 2 lines 55 - 58, col 9 lines 26 - 30, the pause feature keeps the video stationary in time), in response to a user at the destination requesting to resume, stopping the sliding (col 3 lines 16-46, this feature is

inherent and must be included to play the video after pausing, normal controls of a video tape player in col 2 lines 55 - 65, all video tape players include a button for resuming play after pausing).

Regarding claim 14, Atalla discloses in response to a user at a destination requesting to rewind (col 5 lines 8 - 12), sliding the user selected point within the queue at such a rate to cause the playback point to move backward in time (col 5 lines 8 - 12, sliding backward is met by reversing at twice the speed), in response to a user at the destination requesting to resume, stopping the sliding (col 5 lines 8 - 12, this feature is inherent and must be included to play the video after rewinding, normal controls of a video tape player in col 2 lines 55 - 65, all video tape players include a button for resuming play after rewinding).

Regarding claim 15, Atalla discloses in response to a user at a destination requesting to fast forward (col 3 lines 37 - 47), sliding the user selected point within the queue at such a rate to cause the playback point to move forward in time (col 3 lines 16-46, sliding forward is met by reading out every 4'th frame), in response to a user at the destination requesting to resume, stopping the sliding (col 3 lines 16-46, this feature is inherent and must be included to play the video after fast-forwarding, normal controls of a video tape player in col 2 lines 55 - 65, all video tape players include a button for resuming play after rewinding).

Considering claim 18, Atalla discloses a headend (fig 2, col 2 lines 2 - 17, col 3 lines 16-46, the headend is met by community center 10), the headend being operative to establish a buffered storage queue at the headend (col 3 lines 16 - 46, col 4 lines 32 - 67), the headend being further operative to transmit a stream from the headend (fig 2 item 65, col 3 lines 16 - 46), the stream being derived from the signal (fig 2, col 3 lines 16 - 46, col 4 lines 10 -18, stream 65 is derived from the signal transmitted to the headend from master files via link 34), and the stream

originating from a user selected playback point in the buffered storage queue (col 3 lines 16 - 46, col 5 lines 9 - 12, playback point can be selected by fast-forwarding or reversing video in the buffer).

Atalla fails to disclose the plurality of hubs and nodes. See claim 11 for obviousness.

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atalla (5,832,287) in view of Lawrence et al (5,555,277) as applied to claim 11 above, and further in view of Logan et al (5,371,551).

Considering claim 16, Atalla discloses receiving the stream at the destination (fig 2 item 90, col 3 lines 16 - 47, col 5 lines 1 - 9) and playing the stream at the destination via a settop box (col 5 lines 1-21, col 6 lines 57 - 67). Atalla fails to disclose establishing a buffered storage queue at the destination that receives the stream and in response to a user selecting a desired position in the destination buffered storage queue, playing the stream at the destination from the desired position in the destination buffered storage queue.

Logan teaches including a buffer in a user's receiver provides displaying a mosaic of images representing positions of video which a user can select to view an instant replay (col 2 lines 3 - 10, col 5 lines 35 - 50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Atalla to include a buffer storage queue at the destination as claimed to provide the user with an instant replay feature enabling the user to quickly replay a desired portion of a video.

## (11) Response to Argument

{A} In re page 6, appellant states, Atalla fails to describe or suggest that the communication system includes a headend, a plurality of hubs, with each hub sending the programming to at least one node that distributes the programming to end users. Later, the appellant states that the headend is the master file/host 11 of figure 1 eluding that the "community system" relied upon by the Examiner is not a headend.

In response to Appellant's argument, page 7 lines 20 - 23 of Appellant's specification defines a headend, in particular "Headend 14 receives programming information from a variety of sources....". Atalla, col 1 line 66 - col 2 line 29, discloses a community system 10 which receives and stores video programs from master/file 11 and from the network program gateway 102 for distribution to requesting users. It is clear from the disclosure of Atalla and from figure 2 that the community system 10 receives programming from a variety of sources. As a result, based on the definition of a headend as defined by the Appellant's, community system 10, relied upon by the Examiner, is a headend.

[B] In re page 6, Appellants argue that Atalla fails to describe or suggest the buffered storage queue is locate at the headend and that the stream is transmitted from the headend, with the stream originating from a user selected playback point in the buffered storage queue, and with the stream passing through a hub and a node to reach the end user.

In response to Appellant's arguments regarding the headend, Examiner in {A} asserted that community system 10 functions as a headend as defined by the Appellants. In response to Appellant's argument regarding "Atalla fails to describe or suggest the buffered storage queue is located at the headend and that the stream is transmitted from the headend, with the stream originating from a user selected playback point in the buffered storage queue", the Examiner

points out column 3 lines 31 - 46 in Atalla. In particular, Atalla discloses "For example, if the user wanted to fast forward the video program by a factor of four, the microcell reads every fourth frame of data from the buffer memory as it constructs the program data from the buffer 52 to send to the user". Atalla clearly discloses a stream which originates from a user selected playback point in the buffered storage queue and as a result discloses the claimed limitation.

In response to Appellants arguing that Atalla fails to disclose the hub and node network, the Examiner recognized that Atalla was silent regarding this claimed limitation. As a result, the Examiner relied upon Lawrence as a teaching.

In re page 6, appellant states that Lawrence fails to describe or suggest that the buffered storage queue is located at the headend and that the stream is transmitted from the headend, with the stream originating from a user selected playback point in the buffered storage queue.

In response to the Appellant's, argument, the Examiner reiterates that Lawrence was utilized to teach implementing a hub and node network and not any type of buffered storage queue located at a headend.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

VS

February 25, 2002

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PATENT EXAMINER

Brooks & Kushman 1000 Town Center 22nd FL Southfield MI 48075